IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Application No.:

10/768,403

Confirmation No.:

7218

iling Date:

January 30, 2004

nventors:

Murphy et al.

Title:

SYSTEM AND METHOD FOR FACILITATING

CARDIAC INTERVENTION

Examiner:

Unknown

Art Unit:

3788

Atty. Dkt. No.:

5838-03103/EBM

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1,8

DATE OF DEPOSIT:

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INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Sir:

It is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 (A1-A34) be considered by the Examiner and made of record. Copies of the listed documents are enclosed for the convenience of the Examiner.

Should any additional fees be required, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. Deposit Account No. 50-1505/5838-03103/EBM.

Respectfully submitted,

Ério/B/Meyertons

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Date:

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Form PTO-1449 (podified)C,
List of Patents and Publications
For Applicant's Information
Disclosure Statement
(Use several sheets if necessary)

ATTY. DKT. NO. 5838-03103

APPLICANT: Murphy et al.

ART NO. 3762

SERIAL NO. 10/768,403

| Disclosure Statement (Use several sheets if necessary) | | | FILING DATE: January 30,2004 CONFIRMATION NO. | | | ON NO. 3788 | | |
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| | | | | DOCUMENTS | | <u> </u> | | |
| EXAM. INITIALS | REF. DES. | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE | |
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| EXAM. INITIALS | REF. DES. | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES/NO | |
| | | | | *************************************** | | | | |
| | | | | , Title, Date, Pertinen | | | | |
| | 111 | of coronary artery disease" Circulation 1994; 90, No 1, pp. 127-138 | | | | | | |
| - | A2 | Antman, Elliott M. et al., "Abciximab Facilitates the Rate and Extent of Thrombolysis- Results of the Thrombolysis in Myocardial Infarction (TIMI) 14 Trial", Circulation, Jun. 1, 1999, pp. 2720-2732. | | | | | | |
| ú | A3 | | | | | | | |
| | A4 | | | | | | | |
| | A5 | Miles, K.A., "Measurement of tissue perfusion by dynamic computed tomography", <i>The British Journal of Radiology</i> , 1991, vol. 64, No. 761, pp. 409-412. | | | | | | |
| | A6 | | | | | | l Computed | |
| | A7 Rumberger, John A. et al., "Use of Ultrafast Computed Tomography to Quantitate Regional My Perfusion: A Preliminary Report", <i>Journal of the American College of Cardiology</i> , vol. 9, no. 1 pp. 59-69. | | | | | | | |
| | A8 | J.M. Guccione et al., "Passive Material Properties of Intact Ventricular Myocardium Determined from a Cylindrical Model" <i>Journal of Biomechanical Engineering</i> , vol. 113, Feb. 1991. | | | | | | |
| | A9 K.D. Costa et al., "A Three-Dimensional Finite Element Method for Large Elastic Deformation Ventricular Myocardium: I-Cylindrical and Spherical Polar Coordinates" <i>Journal of Biomecha Engineering</i> , Nov. 1996, vol. 118, pp. 452-463. | | | | | | s of nical | |
| A10 P.J. Hunter et al., "Modeling the mechanical properties of cardiac muscle" <i>Progress in Molecular Biology</i> , 69 (1998) pp. 289-331. | | | | | | | ı Biophysics & | |
| | | R. Mazhari et al., "Integrative Models for Understanding the Structural Basis of Regional Mechanical Dysfunction in Ischemic Myocardium" <i>Annals of Biomedical Engineering</i> , 2000, vol. 28, pp. 979-990. | | | | | | |
| | A12 | Hurst et al., "Hurst's The He 623-684. | eart, Arteries and | Veins, 9th Edition" McGra | aw-Hill, 199 | 8, Chapters | 18-20, pp. | |
| | A13 | Y. Sun et al., "A compreher baroreflex" <i>The American J</i> | | | | ience of per | icardium and | |

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Page 2 of 3

| Form PTO-1449 (modified) | | | ATTY. DKT. NO. 5838-03103 | | | SERIAL NO. 10/768,403 | |
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| List of Patents and Publications | | | | | APT NO 2762 | | |
| For Applicant's Information | | | APPLICANT: Murphy et al. | | ART NO. 3762 | | |
| Disclosure Statement | | | | | CONFIDMATION NO 2700 | | |
| (U: | se sever | al sheets if necessary) | FILING DA | FILING DATE: January 30,2004 CONFIRMATION NO. 378 | | | |
| U.S. PATENT DOCUMENTS | | | | | | | |
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| | | | | | | | |
| | | OTHER ART (Inch | iding Author | , Title, Date, Pertinent P | ages, E | tc.) | |
| | Δ 1.4 | Makhijani, V. B. et al., "Th | ree-dimensional | coupled fluid - Structure simula | ation of r | pericardial b | ioprosthetic |
| | | Makhijani, V. B. et al., "Three-dimensional coupled fluid - Structure simulation of pericardial bioprosthetic aortic valve function" ASAIO Journal, 1997, 43:M387-M392. | | | | | |
| | A15 | Olszewski, M. E., "Segment | tation of Cardiac | Magnetic Resonance Images U | Jsing Mu | ıltidimensio | nal Active |
| | | 1 | rtment of Electric | cal and Computer Engineering, | The Un | iversity of Id | owa, April, |
| | 2001. A16 Patel, N. C. et al., "Neurological Outcomes in Coronary Surgery: Independent Effect of Avoiding | | | | | | |
| | A16 | Patel, N. C. et al., "Neurolog | gical Outcomes i | n Coronary Surgery: Independ | ent Effe | Ct of Avoidi | ng oting of The |
| • | Cardiopulmonary Bypass" Ann. Thorac. Surg. 2002;74:400-6, Presented at the 38th Annual Meeting of Society of Thoracic Surgeons, Fort Lauderdale, FL, Jan 28-30, 2002. | | | | | eting of The | |
| | A17 | F.H. Sheehan et. al., "Advantages and applications of the centerline method for characterizing regional | | | | | |
| ٠ | *** / | ventricular function" Circulation 1986; 74, no. 2, pp. 293-305. | | | | | |
| | A18 | Imamaki, M. et. al., "Prediction of improvement in regional left ventricular function after coronary artery | | | | | ary artery |
| | | bypass grafting: quantitative stress-redistribution ²⁰¹ TI imaging in detection of myocardial viability" <i>J. Cardiovascular Surg.</i> Oct., 2002; Vol. 43, No. 5: pp. 603-7. | | | | | |
| | | | | | | | |
| | A19 | E. R. Holman et. al., "Detection and Quantification of Dysfunctional Myocardium by Magnetic Resonance | | | | | |
| | | Imaging" Circulation 1997; Vol. 95, No. 4; pp. 924-931. | | | | | |
| | A20 | van der Geest, Rob J. et al., "Comparison Between Manual and Semiautomated Analysis of Left Ventricular Volume Parameters from Short-Axis MR Images", Journal of Computer Assisted Tomography, vol. 21, no. 5, 1997, pp. 756-765. | | | | | |
| | | | | | | | voi. 21, 110. 3, |
| | A21 | Weiss, Robert M. et al., "Evaluation of Cardiovascular Structure and Function with Electron-Beam Computed | | | | | |
| | | Tomography", Marcus Cardiac Imaging, 1996, Vol. 2, Chapt. 53: 820-828. | | | | | |
| | A22 | Dai, Xiaolong et al., "Left-Ventricle Boundary Detection from Nuclear Medicine Images", | | | | | |
| | | (http://www4.ncsu.edu/eos/users/w/wes/homepage/daiHTML/cmrg_JDI.fm3.html#FN1) Journal of Digital | | | | | |
| | Imaging, Vol. 11, No. 1, Feb., 1998. | | | | | | |
| | A23 | Di Donato, M. et al. "Regional Myocardial performance of non-ischaemic zones remote from anterior wall left | | | | | |
| | | ventricular aneurysm - Effects of aneurysmectomy", European Heart Journal, (1995) 16, 1285-1292. | | | | | |
| • | A24 | T.F. Cootes and C. J. Taylor, "Statistical Models of Appearance for Computer Vision" July 10, 2000 http://cvl.umiacs.umd.edu/users/nanda/Academics/Academic.html | | | | | |
| | | Cootes, T. F. et al., "Constra | | | | | |
| | HZ3 | | | 2292/http:zSzzSzwww.wiau.m | an.ac.uk | zSz~bimzSz | PaperszSziccv |
| | | 1 | | Conf. on Computer Vision 20 | | | - |
| | A26 | | | on No. 1193837.005, April 11, | | | |
| | 1 1 | 1 | | | | | 1 |

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| | | τ | J <mark>.S. PATENT</mark> | DOCUMENTS | | | | |
| EXAM. INITIALS | REF. DES. | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE | |
| | A27 | 10/135,465 | 4/30/2002 | Murphy et al. | | | | |
| | A28 | 10/800,461 | 3/15/2004 | Murphy et al. | | | | |
| | A29 | 10/800,433 | 3/15/2004 | Murphy et al. | | - | | |
| | A30 | 10/769,745 | 1/30/2004 | Suresh et al. | | | | |
| | A31 | U.S. Patent Application entitled "A System and Method for Facilitating Cardiac Intervention | 1/30/2004 | Murphy et al. | | | | |
| | | FOR | REIGN PATE | INT DOCUMENTS | | | | |
| EXAM. INITIALS | REF. DES. | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES/NO | |
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| , | | | _ | , Title, Date, Pertinent I | _ | | | |
| | A32 | nerac.com "tech track: Flore | ence H Sheehan" | , Question No. 1199989.005, | February 2 | 28, 2003. | | |
| | A33 | nerac.com "RetroSearch: Active Appearance Models", Question No. 1199989.009, Sept. 15, 2003. | | | | | | |
| | A34 | nerac.com "tech track: cardiac MRI", Question No. 1193837.005, April 12, 2003. | | | | | | |
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